RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:

Source:

Date Processed by STIC:

0526,411

ENTERED



PCT

RAW SEQUENCE LISTING DATE: 03/11/2005 PATENT APPLICATION: US/10/526,411 TIME: 08:00:41

Input Set: A:\Final sequence list-13173-00009-US.txt

```
3 <110> APPLICANT: Klebsattel, Martin
              Keetman, Ulrich
      5
              Herbers, Karin
      6
              Flachmann, Ralf
      7
              Sauer, Matt
              Hillebrand, Heike
     10 <120> TITLE OF INVENTION: Transgenic expression cassettes for expressing nucleic acids
in
                                                                         p3.6)
              nonreproductive floral tissues of plants
     13 <130> FILE REFERENCE: 13173-00009-US
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/526,411
C--> 15 <141> CURRENT FILING DATE: 2005-03-02
     15 <150> PRIOR APPLICATION NUMBER: PCT/EP 2003/009594
     16 <151> PRIOR FILING DATE: 2003-08-29
     18 <150> PRIOR APPLICATION NUMBER: DE 102 41 124.7
     19 <151> PRIOR FILING DATE: 2002-09-03
     21 <160> NUMBER OF SEQ ID NOS: 36
     23 <170> SOFTWARE: PatentIn version 3.3
     25 <210> SEQ ID NO: 1
     26 <211> LENGTH: 2039
     27 <212> TYPE: DNA
     28 <213> ORGANISM: Arabidopsis thaliana
     30 <220> FEATURE:
     31 <221> NAME/KEY: promoter
     32 <222> LOCATION: (1)..(2039)
     33 <223> OTHER INFORMATION: 76L promoter (including 5'-untranslated region) of
     34
              gene locus At3q01980
     37 <400> SEQUENCE: 1
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     39 gaaagaaaaa aagtgatgaa atacattaga aaccttttgg atatagtcaa ggacttgagt 120
     40 gtctctgatc ttattgccat cttggtcgat gactttgaaa acgtccatga accaacctcc 180
     41 atcggaagag atgtaagctt tcttgatcac aagattcata tcagtgagca cttgtactac 240
     42 ttccaataga gtcccatgtt tgttcacact atcaaccttt tatttagcac cacaaacaaa 300
     43 cagggaacte tgttttetea aaatetettt gtttggtaca gaaceaettg aacaatttga 360
     44 agagacagat ttatttacct gaataacagt ggcatcgtcg cttgcgttgt tgtctattac 420
     45 aactetgtat eeaceatgaa acatacataa ataaagatga atgttttage agetggaate 480
     46 tttacaaggg tatagaggct cacaaacgga gcatggagaa acagaggacc tagaaaacaa 540
     47 taaaagagta tggagagaaa gagaaaaacc tgggaggatt cattctcctg atgagcttgg 600
     48 catattcatc atcatccatg gttgtagtat gtatctcctt ggtgatttgg ctgcagcaga 660
     49 aacccagaag agtgtgagtc ctccaatttc tgaggaaaat tcctaaaaga gagaggaga 720
     50 gggaagttga aggaggataa aaatggtagg ccaccggaac cgaaccttgt tttcattagt 780
     51 tgatcgagca cgtgccacta aagattctta gagatgacgt ggcacgggca cagcaacttt 840
     52 tagattctgt tataattgtt cgaatactac caaaagtcgg gtgaagattt ggggtcaatt 900
     53 tgatgatcat aaaggggatt atatteteet teteaageaa gatgtggtat ttaetagtat 960
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Input Set : A:\Final sequence list-13173-00009-US.txt

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54 aatagatcat tegttatett gaggtagaee teteegtaae gtteaeaggt geatgaeeaa 1020
55 gtaacaattt gatteettte cageataaeg teatgttggt tgeaaaaaga aggeaaagta 1080
56 gagcaagcaa gcaagcaaag catttttctt attttatatt ttgttgcgga ttccaccacc 1140
57 cacttgaaaa attgacatgt cacaatgatt tcgtatccta gtcttttatt atttaacact 1200
58 ctcacaatcc cattactcta cacctctttc attaagtcaa cacacggttt tcaaaaaatcc 1260
59 actaccetce caccacctag aatettttgt tacctaccaa cacceteett tgttetettt 1320
60 atatattggt ccaactaaat caataaggga aagcatcctt ttggttggag gaattgcttt 1380
61 catteteact etttgtgtgt tgateaatgg actagetaat aacaagttee teetetatat 1440
62 atttcaaaag aatggaacag aaacataaac gaaagacaga gtacctgatg ttgatgattc 1500
63 attgtctgtc tggagctccc aaatgccttt tatgcttaca tattcataac caacaacggc 1560
64 tattaattat aaaccaaaaa cacgaaataa gtttgtagca aagtgaaatt aggaatcttg 1620
65 gagatggatc cattagtagt aggataatag gatatgatgg aatttggttg gggaacagtg 1680
66 ataacttacg cttgcttccg gcgccgggaa agttggaaaa cctacaaagt acagaaatgg 1740
67 atctgggcct tgaagtgggc tttttattaa agaaaaaaat acatctccgt tatcaatcac 1800
68 catcttcttc tatctacaaa ttaaagaagg taacaacaga acgtggtgga tcatgtggtt 1860
69 aggcattaat tatttgcttt gtttcgccgt tttggtaaca cacagacaca gttccggtaa 1920
70 gagettttge agecaetett tatagttatt tagaattgge gategaatea ateteaetee 1980
71 ctccctccct taagtcttgt tgaatctgct gaattgtttt ataaagagtt actttggca 2039
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75 <211> LENGTH: 2180
76 <212> TYPE: DNA
77 <213> ORGANISM: Arabidopsis thaliana
79 <220> FEATURE:
80 <221> NAME/KEY: promoter
81 <222> LOCATION: (1)..(2180)
82 <223> OTHER INFORMATION: 84L promoter (including 5'-untranslated region) of
83
         gene locus At1g63140
85 <400> SEQUENCE: 2
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87 aactcatata tatttcattc atggaaaagt ttaatcaata acaaatacta tcttcatttc 120
88 ataaaagcct tgtttcagat tttttcacac acatttaaaa gtgttttaag tttatcttat 180
89 acctttaagt acatttatga tttttttttt ctcctattaa ataagctgaa agattataga 240
90 taaatggttt tgttttatta aaaatgatgc attgaaaata taaaaggaca ttttatatat 300
91 agatactaca tgattaggcc gatggaacca aagatgagcg actcttcttg taacattgtg 360
92 tttgctacgc aatgctcggt tttttttttc ttagatcgag actttgcctg agattctggt 420
93 tttcttcgat tgtgaaatca tatatgtctt gccttctcat ataggttcaa cattgaccaa 480
94 caaaaactac gggtggttta gtttttttg ggtggagagt ggagactaac cttgaccttt 540
95 ttcatttgta atgatttttc tttcttgtat gaactattgt ttgtttattg gcgctgttca 600
96 tttgttccga gtgttttcgt atatgcttta aacaagcacg tactatcagc aatagcaaaa 660
97 gtaacatgat atttgttaat cccgttggaa attcatgtcc attattttgt atatatatat 720
98 attatataat agtagaattt ggttatgtag tgcatattct ctaaatctat gctttctaag 780
99 gttaaaaaca ggcgcccata tggacgacat aaatgtcgat atttaagagg cactgcaagt 840
100 tgaacaaaaa aaaaaaagta taggcactgc aaaagttatc caacgtattt aagactaagg 900
101 actaaagatt caaagataat attcagaaaa agaaaaagaa aaaaagagaa gataatattc 960
102 ggaaacatcc acaagcattc taaatctaga aaacataaat aatacagcaa agatggggat 1020
103 gaagatatga tocaactoca toacagatto toaagacaga tttagaaagt gtoaagotoa 1080
104 ccaaaagggt tataggagac tgactgttaa ttgaaatgct ttctacacgt ggacgcactg 1140
105 atatcatatt aaaacctgat tqtttgttga acattcacta actcatacca aacggtccaa 1200
106 acctatgtct ccattttctt aaatgttgat ttcgattcca tacctacttt gcatacatta 1260
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Input Set : A:\Final sequence list-13173-00009-US.txt

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107 ttgaatgtgt ttcttaagtt gtgattaaaa ttaaatgagc acaatatcac agtcgaatgg 1320
108 tatatcgatg taacacttta ggattgaatc aatatgaaaa gttatacacc gaatttgtga 1380
109 gaaacgagta tagcttagac aaaatttgtt tttcttaaat taagcggaaa aataattaaa 1440
111 gtagagtgtt aactatttaa acaaagaaaa ctccaaaccc aattgagaaa ctactcaaac 1560
112 atagaaacaa cacataatga ttcagtagct accaatatca tattcaactt tgtttcgatt 1620
113 cctttaaaac aaaatataat taaccaaata aaataggtca taatcgattc agaaacaatt 1680
114 tcatattctt ctctagttta gttcagtttc attctaccgg agttgtatac aatctataat 1740
115 tttatcgctt attaccttaa aagcgtcctc aaaccaacca aaacaaaaat agttgcatca 1800
116 atgaatccat caaagcatat aaattcacac cqtcttaaaa tggagtgttg atggataagt 1860
117 accaacaatt ttagaccatt cacactgaat gagtatgact aacattcaca ttcacattca 1920
118 attaggaaag ttgtactaat gaacacacaa taaaagtgaa aacaaatctc tacatattct 1980
119 tgtacaccaa tctatattag atgatcattt taaatataca cgaatattaa ttttataaat 2040
120 gaaaaatacg tgcccatatt ttaattaatt tatatattta gctatcaaat attaggcata 2100
121 atgttggtga ggtttctgag tataaaaaat gacaaagtat gaataccatc tataccttta 2160
122 ttacctatct ttctcgattt
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 1033
127 <212> TYPE: DNA
128 <213> ORGANISM: Arabidopsis thaliana
130 <220> FEATURE:
131 <221> NAME/KEY: promoter
132 <222> LOCATION: (1)..(1033)
133 <223> OTHER INFORMATION: 76S promoter (including 5'-untranslated region) of
134
         gene locus At3g01980
136 <400> SEQUENCE: 3
137 aggtgcatga ccaagtaaca atttgattcc tttccagcat aacgtcatgt tggttgcaaa 60
138 aaqaaqqcaa aqtaqaqcaa qcaaqcaaqc aaaqcatttt tcttatttta tattttqttq 120
139 cggattccac cacccacttg aaaaattgac atgtcacaat gatttcgtat cctagtcttt 180
140 tattattaa cactctcaca atcccattac tctacacctc tttcattaag tcaacacacg 240
141 gttttcaaaa atccactacc ctcccaccac ctagaatctt ttgttaccta ccaacaccct 300
142 cctttgttct ctttatatat tggtccaact aaatcaataa gggaaagcat ccttttggtt 360
143 ggaggaattg ctttcattct cactctttgt gtgttgatca atggactagc taataacaag 420
144 ttcctcctct atatatttca aaagaatqqa acagaaacat aaacqaaaga cagagtacct 480
145 gatqttgatg attcattqtc tqtctqqaqc tcccaaatgc cttttatqct tacatattca 540
146 taaccaacaa cqqctattaa ttataaacca aaaacacqaa ataaqtttqt aqcaaaqtqa 600
147 aattaggaat cttggagatg gatccattag tagtaggata ataggatatg atggaatttg 660
148 gttqqqqaac aqtqataact tacqcttqct tccqqcqccq qqaaagttqq aaaacctaca 720
149 aagtacagaa atggatctgg gccttgaagt gggcttttta ttaaagaaaa aaatacatct 780
150 ccgttatcaa tcaccatctt cttctatcta caaattaaag aaggtaacaa cagaacgtgg 840
151 tggatcatgt ggttaggcat taattatttg ctttgtttcg ccgttttggt aacacacaga 900
152 cacagttccg gtaagagett ttgcagccac tetttatagt tatttagaat tggcgatcga 960
153 atcaatctca ctccctccct cccttaagtc ttgttgaatc tgctgaattg ttttataaag 1020
154 agttactttg gca
157 <210> SEQ ID NO: 4
158 <211> LENGTH: 1097
159 <212> TYPE: DNA
160 <213> ORGANISM: Arabidopsis thaliana
162 <220> FEATURE:
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RAW SEQUENCE LISTING DATE: 03/11/2005
PATENT APPLICATION: US/10/526,411 TIME: 08:00:41

Input Set : A:\Final sequence list-13173-00009-US.txt

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163 <221> NAME/KEY: promoter
164 <222> LOCATION: (1)..(1097)
165 <223> OTHER INFORMATION: 84S promoter (including 5'-untranslated region) of
166
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168 <400> SEQUENCE: 4
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170 tcatattaaa acctgattgt ttgttgaaca ttcactaact cataccaaac ggtccaaacc 120
171 tatgtctcca ttttcttaaa tgttgatttc gattccatac ctactttgca tacattattg 180
172 aatgtgtttc ttaagttgtg attaaaatta aatgagcaca atatcacagt cgaatggtat 240
173 atcgatgtaa cactttagga ttgaatcaat atgaaaagtt atacaccgaa tttgtgagaa 300
174 acgagtatag cttagacaaa atttgttttt cttaaattaa gcggaaaaat aattaaacag 360
175 agaccaaatt aagcgttett ettgaactga aatcactaaa gtaaagttaa eeegttagta 420
176 gagtgttaac tatttaaaca aaqaaaactc caaacccaat tqaqaaacta ctcaaacata 480
177 gaaacaacac ataatgattc agtagctacc aatatcatat tcaactttgt ttcgattcct 540
178 ttaaaacaaa atataattaa ccaaataaaa taggtcataa tcgattcaga aacaatttca 600
179 tattettete tagtttagtt cagttteatt etaceggagt tgtataeaat etataatttt 660
180 atcgcttatt accttaaaag cgtcctcaaa ccaaccaaaa caaaaatagt tgcatcaatg 720
181 aatccatcaa agcatataaa ttcacaccgt cttaaaatgg agtgttgatg gataagtacc 780
182 aacaatttta gaccattcac actgaatgag tatgactaac attcacattc acattcaatt 840
183 aggaaagttg tactaatgaa cacacaataa aagtgaaaac aaatctctac atattcttgt 900
184 acaccaatct atattagatg atcattttaa atatacacga atattaattt tataaatgaa 960
185 aaatacgtgc ccatatttta attaatttat atatttagct atcaaatatt aggcataatg 1020
186 ttggtgaggt ttctgagtat aaaaaatgac aaagtatgaa taccatctat acctttatta 1080
187 cctatctttc tcgattt
190 <210> SEQ ID NO: 5
191 <211> LENGTH: 19
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of the artificial sequence:
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200 gaccctgtcc cacctccaa
                                                                       19
203 <210> SEQ ID NO: 6
204 <211> LENGTH: 21
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Description of the artificial sequence:
210
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212 <400> SEQUENCE: 6.
213 tgagaactgc gattgtttgc a
                                                                       21
216 <210> SEQ ID NO: 7
217 <211> LENGTH: 25
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of the artificial sequence:
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Input Set : A:\Final sequence list-13173-00009-US.txt

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225 <400> SEQUENCE: 7
226 gtcgactatc ctctgcgcaa tgaat
                                                                       25
229 <210> SEQ ID NO: 8
230 <211> LENGTH: 25
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Description of the artificial sequence:
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238 <400> SEQUENCE: 8
                                                                       25
239 cccgggaaat cgagaaagat aggta
242 <210> SEQ ID NO: 9
243 <211> LENGTH: 25
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Description of the artificial sequence:
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251 <400> SEQUENCE: 9
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                                                                       25
255 <210> SEQ ID NO: 10
256 <211> LENGTH: 25
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Description of the artificial sequence:
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264 <400> SEQUENCE: 10
265 gtcgaccatg tttcagagga tatgt
                                                                       25
268 <210> SEQ ID NO: 11
269 <211> LENGTH: 1187
270 <212> TYPE: DNA
271 <213> ORGANISM: Arabidopsis thaliana
273 <220> FEATURE:
274 <221> NAME/KEY: CDS
275 <222> LOCATION: (132)..(764)
276 <223> OTHER INFORMATION: coding for gene product of Arabidopsis thaliana
277
          gene locus At3q01980
279 <400> SEQUENCE: 11
280 gttccggtaa gagcttttgc agccactctt tatagttatt tagaattggc gatcgaatca 60
281 atctcactcc ctccctccct taagtcttgt tgaatctgct gaattgtttt ataaagagtt 120
282 actttggcaa a atg gaa aat ccg gcg aag aga gtg ttg atg aca tcc aac
283
                 Met Glu Asn Pro Ala Lys Arg Val Leu Met Thr Ser Asn
284
285 ggc gac gag gtg tcc cga aac atc gct ttc cat cta gcc aaa cac ggt
286 Gly Asp Glu Val Ser Arg Asn Ile Ala Phe His Leu Ala Lys His Gly
287
        15
                             20
288 tgc aag ttg gta atg atg gga aat gag ggt tcc cta agg agc att gta
289 Cys Lys Leu Val Met Met Gly Asn Glu Gly Ser Leu Arg Ser Ile Val
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RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/526,411

DATE: 03/11/2005 TIME: 08:00:42

Input Set : A:\Final sequence list-13173-00009-US.txt

Output Set: N:\CRF4\03112005\J526411.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:25; Xaa Pos. 5,10,13
Seq#:26; Xaa Pos. 6,11
Seq#:27; Xaa Pos. 9,12
Seq#:28; Xaa Pos. 7
Seq#:29; Xaa Pos. 5,7,13,14
Seq#:30; Xaa Pos. 5,9
Seq#:31; Xaa Pos. 3
Seq#:32; Xaa Pos. 9

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/526,411

TIME: 08:00:42

DATE: 03/11/2005

Input Set : A:\Final sequence list-13173-00009-US.txt

Output Set: N:\CRF4\03112005\J526411.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0 L:848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0 L:868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 L:888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0 L:907 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0 L:926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0 L:950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0 L:970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0